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Tracheobronchopathia Osteochondroplastica

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A 57-year-old woman presented to the emergency department with 2 episodes of hemoptysis. Her medical history was notable for occasional wheezing and chronic cough. Computed tomography of the chest revealed nodular thickening and calcification of the trachea, sparing the posterior wall (Figure, Panels A through C). Bronchoscopy demonstrated extensive tracheal nodular excrescences sparing the posterior membranous wall (Figure, Panel D). No active source of bleeding was identified. Histological examination of the nodular lesions showed osteocartilaginous tissue with ossification in the submucosal region, consistent with tracheobronchopathia osteochondroplastica (Supplemental Figure, available online at http://www.mayoclincproceedings.org). The patient experienced no further episodes of hemoptysis and is currently being followed periodically as an outpatient.

Tracheobronchopathia osteochondroplastica (TPO) is a rare yet benign tracheobronchial disease of unknown etiology. It is characterized by multiple submucosal osteocartilaginous nodules that project into the lumen of the large airways.[1] Nodules generally arise from the anterior and lateral aspect of the inner tracheal and proximal bronchial wall. Because these nodules arise from cartilage, the posterior membranous wall of the trachea is typically spared. Bronchoscopic findings alone are often sufficient to establish a diagnosis. Although most commonly an incidental finding, patients may present with dyspnea on exertion, wheezing, recurrent infections, and hemoptysis.[2] In most cases, the disease progresses very slowly, although more rapid progression, leading to respiratory insufficiency, has been reported.[3] Treatment is seldom required except in cases of severe airway obstruction in which bronchoscopic dilation may be indicated.[4]

SUPPLEMENTAL ONLINE MATERIAL

Supplemental online material can be found online at http://www.mayoclinicproceedings.org. Supplemental material attached to journal articles has not been edited, and the authors take responsibility for the accuracy of all data.

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1. Tatar D, Senol G, Demir A, Polat G. Tracheobronchopathia osteochondroplastica: four cases. *Chin Med J (Engl)*. 2012;125(16):2942-2944.
2. Sun J, Xie L, Su X, Zhang X. Tracheobronchopathia osteochondroplastica: case report and literature review. *Respir Med Case Rep*. 2015;26(15):14-17.
3. Molloy AR, McMahon JN. Rapid progression of tracheal stenosis associated with tracheopathia osteochondroplastica. *Intensive Care Med*. 1988;15(1):60-62.
4. Prakash UBS. Tracheobronchopathia osteochondroplastica. *Semin Respir Crit Care Med*. 2002;23(4):167-175.

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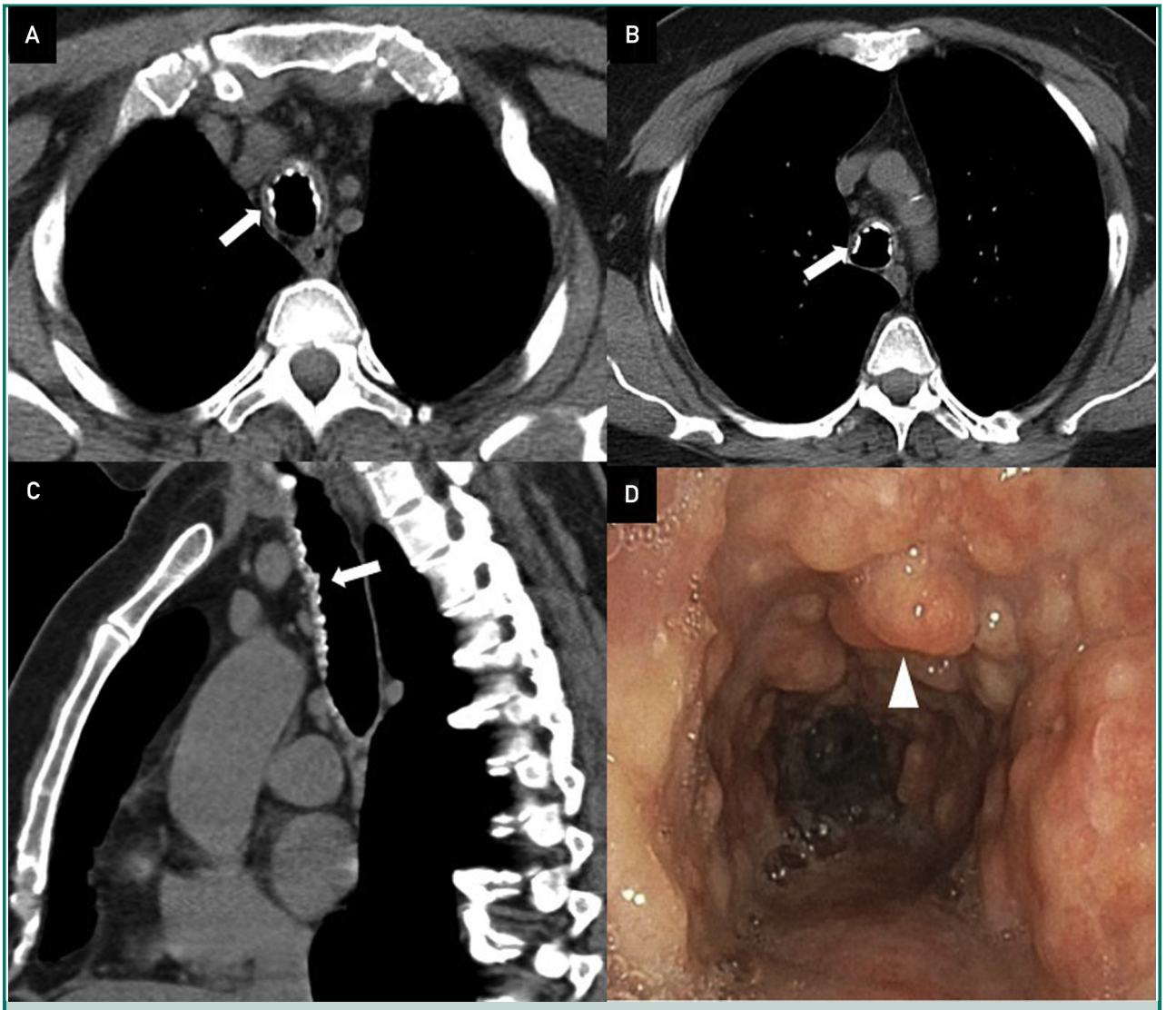

FIGURE. A-C: Non-contrast CT of the chest (axial and sagittal views), demonstrating calcified nodular thickening of the trachea, sparing the posterior wall (arrows); D: Bronchoscopy showing tracheal nodular excrescences sparing the posterior membranous wall (arrow).

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